

# Lesson 2

## Cadet Challenge



### Key Terms

Cadet Challenge  
curl-ups  
flexed-arm hang  
Presidential Physical Fitness Award (PPFA)  
pull-ups  
shuttle run  
v-sit reach

### What You Will Learn to Do

- Meet the physical fitness standards for the Cadet Challenge

### Linked Core Abilities

- Take responsibility for your actions and choices

### Skills and Knowledge You Will Gain Along the Way

- Compare the Cadet Challenge to the Presidential Physical Fitness Award
- Distinguish between the Presidential Physical Fitness Award and the National Physical Fitness Award
- Identify the five Cadet Challenge exercises
- Describe the proper techniques for the Cadet Challenge exercises
- Define the key words contained in this section

## Introduction

This is it! Time to put on your sneakers and start warming up for what may be the toughest part of this unit—participating in exercises designed for the Presidential Physical Fitness Award (PPFA) program. Get ready to tackle these exercises developed to test your physical ability. They require endurance, speed, strength, and flexibility. What can Cadet Challenge do for you? First, it allows you to develop an understanding and appreciation for physical fitness. Second, it shows how an exercise program can improve health and appearance, thereby improving self-confidence. Finally, there is the personal satisfaction involved in striving to achieve a goal and in recognizing and recording your own progress.

## The Challenge

Ready to go? It's time for the challenge! **Cadet Challenge** consists of five exercises taken from the **Presidential Physical Fitness Award** program. The Cadet Challenge is the JROTC Physical Fitness Test. Each cadet is required to participate in the physical fitness test conducted twice each school year. Cadets who score at the 85 percent or better on each event on the test may receive the Physical Fitness Ribbon. Read the descriptions of how to execute each exercise carefully. Along with each exercise description is a box showing standards to shoot for based on your age and gender. The Presidential Physical Fitness Test is part of the President's Challenge program that encourages all Americans to make being active part of their everyday lives. To qualify for the PPFA, you must achieve a standard of 85 percent or higher on all five items of the test. In each box showing standards, the 85th percentile standards are listed in the two columns under the heading "PPFA (85%)." If you achieve a standard of 84 percent or below, but above 50 percent, you qualify for the National Physical Fitness Award (NPFA). Fifty percentile standards are listed in each box in the two columns under the heading "NPFA (50%)."

Cadets who score in the 85th percentile or above on Cadet Challenge are eligible to receive the PPFA, which consists of a round blue emblem embroidered with an eagle. Cadets who score in the 50th to 84th percentile are eligible to receive the NPFA, which consists of a round red emblem embroidered with an eagle. Those cadets who achieve Cadet Command's standards in Cadet Challenge are eligible to receive the JROTC Athletic Ribbon. Cadets who attempt all five exercises but score below the 50th percentile on one or more of them are eligible to receive a white round emblem embroidered with an eagle.

If you are a cadet with special needs or have one or more disabilities, which would directly affect your performance on these exercises, see your instructor for criteria for modified or alternative exercises.

### Key Note Terms

**Cadet Challenge** – a physical fitness test that consists of five exercises taken from the Presidential Physical Fitness Award program

**Presidential Physical Fitness Award** – an award earned by achieving a standard of 85 percent or higher on the Presidential Physical Fitness Test

## Improving Your Scores

The exercises in Cadet Challenge test your endurance and physical strength. Initially, it does not matter what you score on these events except to establish a base score from which to build. From there, however, it is important that you establish a routine exercise program, so that your score will improve, and along with it, your health. Work toward achieving the 85th percentile standard. If you have participated in the PPFA program in another physical education program and met the 85th percentile for your age and gender, try to achieve it again this time. If you did not meet that standard, here's a chance to improve.

## Basic Rules of Exercise

As you prepare for the Cadet Challenge, remember to follow these basic rules:

- **To produce positive results, exercise at least three times a week.**
- **Begin your exercise program by warming up for 5 to 7 minutes.**
- **Spend at least 20 minutes on conditioning then cool down for four to six minutes.**
- **With the exception of the v-sit reach, complete the exercises in the challenge during the conditioning period.**
- **Make the v-sit reach part of your warm-up or cool-down.**

Remember to follow an exercise program that includes aerobic exercise for the one-mile run/walk, anaerobic exercise for the shuttle run, muscle strengthening for the pull-ups and curl-ups, and stretching for the v-sit reach. If you give it your all and perform to the best of your abilities, you will

- **Have a stronger body**
- **Feel good about yourself**
- **Appreciate health and fitness**

## Taking the Challenge

The Cadet Challenge consists of the following five events. A more detail explanation of each event can be found on the President's Challenge Web site at [www.presidentschallenge.org/misc/downloads.aspx](http://www.presidentschallenge.org/misc/downloads.aspx). From this site, you can download, *Get Fit: A Handbook for Youth*. You will also find composite records and other forms of the physical fitness program that may be used to score each cadet who participates.

### One Mile Run/Walk

From a standing position on the starting line, run, walk, or use a combination of both to cross the finish line after covering one mile—four times around most high school tracks. Complete the one-mile run/walk according to the standards shown in Table 1.2.1.

**Table 1.2.1: One-Mile Run/Walk Standards**

<b>PPFA (85%)</b>			<b>NPFA (50%)</b>	
<i>Age</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
14	6:26	7:59	7:44	10:06
15	6:20	8:08	7:30	9:58
16	6:08	8:23	7:10	10:31
17	6:06	8:15	7:04	10:22

Courtesy of CACI and the U.S. Army.

Read these times in minutes and seconds; for example, you would read 6:08 as six minutes and eight seconds.

## **Building Health Skills**

As you go through this or any exercise program, it's important to protect your body and build some health skills. These skills include knowing how to warm up, cool down, and stretch.

### **Warming Up, Cooling Down, and Stretching**

Imagine that you are about to go on a five-mile bicycle ride or play your favorite sport. You know that these are strenuous activities that put stress on your bones, muscles, and tendons. How should you prepare your body for these activities? After the activity, what should you do to minimize the effects of the stress your body has just undergone?

Before a workout, use slow movements to warm up the muscles that you will use. When the muscles are warmed up, stretch them. Stretching cold muscles is not effective and can cause injury. After your workout, cool down by slowly moving the muscles you used. Then stretch these muscles as you did before the workout.

Although no single stretching routine is appropriate for every activity, the stretching exercises that follow provide a base for you to build on. It is important not to rush when you perform these movements. A pulled muscle can hold you up much longer than the few minutes of warming up/stretching and cooling down/stretching needed with each workout.

When you perform stretching exercises, do not bounce. Bouncing can tear muscle fibers, and scar tissue can form as a result.

### **Warming Up/Cooling Down**

Before your workout, walk, jog slowly, or do the activity that you are about to participate in at a reduced pace. This warms up your muscles, preparing them for the more intense activity of the workout itself. Similarly, right after the workout, you need to continue moving your muscles at a reduced pace for five to ten minutes, as you did in the warm-up. This cool-down period helps ease the body back to normal levels of muscular activity.

**Note**

To warm up for bike riding, begin by pedaling slowly and gradually increase your speed.

**Side Stretch**

Stand with feet apart, knees bent, and one hand on your hip. Extend the opposite arm overhead and stretch to the side, as shown in Figure 1.2.1. Hold 15 seconds. Repeat in the other direction. Do five times in each direction.

**Hand Grasp**

Grasp your hands behind your back and hold. Stand with your feet apart and knees slightly bent, and lean over at the waist. Pull up your arms behind you, as shown in Figure 1.2.2, and hold 15 seconds.

**Lower Back Curl**

Lie on your back with legs extended. Bring one knee up to your chest. Grasp the leg behind the knee and pull the knee closer to your chest. Next, curl your shoulders toward your knee. Figure 1.2.3 shows how this is done. Hold this position for 15 seconds. Switch to the opposite leg and repeat.

**Calf Stretch**

Stand in a stride position with your right leg forward and hands on your hips. Lean your upper body forward. Simultaneously bend your right leg and extend your left leg back in a continuous line with your upper body. Push your left heel to the ground. Figure 1.2.4 shows this position. Hold for 15 seconds. Repeat with the other leg. Do this five times on each side.

**Hamstring Stretch**

Sit on the floor and extend one leg, toes facing up. Tuck your other foot against your extended thigh. Reach forward over your extended leg and slide your hands down your leg until you feel a stretch. Hold for 15 seconds. Switch to the other leg. Repeat with each leg twice.



Figure 1.2.1: Stretching helps to protect your muscles during exercise.

Courtesy of Susan Spellman.



Figure 1.2.2: The hand grasp stretches your arms and shoulders.

Courtesy of Susan Spellman.



*Figure 1.2.3: Stretch the muscles in your lower back to prevent injury while working out.*

Courtesy of Susan Spellman.



*Figure 1.2.4: Stretching your calves will help prevent cramping and shin splints.*

Courtesy of Susan Spellman.

Take five minutes to practice these stretching exercises.

Each day for a week, do the stretching routine and record how you felt before and after the routine, including any soreness or stiffness. At the end of the week, evaluate the stretching routine and your reactions to it. What are its benefits?

### Note

Select a favorite sport or other physical activity and then ask your physical education teacher or coach to suggest an appropriate warm-up routine for that activity, including stretching exercises.

## Getting Fit

The following activities will help you get in shape and stay fit. Start out slowly if you've not exercised recently, and gradually build up to more repetitions. In no time at all, you'll be able to do these exercises and start feeling the benefits.

### Shuttle Run

From a starting line, run 30 feet to another line where there are two wooden blocks. As fast as you can, pick up one block, return to the starting line, set it down, run back for the other block, and return to the starting line again. Table 1.2.2 shows the standards for the 30-foot **shuttle run**. Read these times in seconds only; for example, you would read 8.7 as 8.7 seconds or 10.0 as 10 seconds.

### Pull-Ups

From a hanging position on a metal or wooden bar, use the overhand grasp (palms facing away from body) or underhand grip (palms facing towards body) to pull your body up so that your chin clears the bar. Then lower your body to the full-hang starting position. Try to do this the number of times shown in Table 1.2.3. Make sure that you are high enough so that your feet do not touch the floor or

### Key Note Terms

**shuttle run** – one of the five events on the Cadet Challenge and Presidential Physical Fitness test that consists of a 30-foot shuttle run

**pull-ups** – one of the five events on the Cadet Challenge and Presidential Physical Fitness Test that consist of pulling the body up from a dead weight hanging position on a bar to having the chin clear the bar

**Table 1.2.2: Standards for the 30-Foot Shuttle Run**

PPFA (85%)			NPFA (50%)	
<i>Age</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
14	9.1	10.1	9.9	11.2
15	9.0	10.0	9.7	11.0
16	8.7	10.1	9.4	10.9
17	8.7	10.0	9.4	11.0

Courtesy of CACI and the U.S. Army.

ground each time you straighten your arms. Do not use jerky motions, kick or bend your legs, or swing during each movement.

An alternative to pull-ups is the flexed-arm hang on page 450.

**Table 1.2.3: Standards for Pull-Ups**

PPFA (85%)			NPFA (50%)	
<i>Age</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
14	10	2	5	1
15	11	2	6	1
16	11	1	7	1
17	13	1	8	1

Courtesy of CACI and the U.S. Army.

## Curl-Ups

From a lying position on the floor or mat, pull your knees up so that your feet are flat on the floor and about 12 inches from your buttocks. Have a partner hold your feet. Place your arms across your chest with hands touching opposite shoulders and elbows held close to your chest. Pull your body upward until your elbows touch your thighs; then, lower your body so that your shoulder blades touch the floor or mat. Within 60 seconds, strive to complete the number of **curl-ups** indicated in Table 1.2.4.

**Table 1.2.4: Standards for Curl-Ups**

PPFA (85%)			NPFA (50%)	
<i>Age</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
14	56	47	45	37
15	57	48	45	36
16	56	45	45	35
17	55	44	44	34

Courtesy of CACI and the U.S. Army.

### Key Note Term

**curl-ups** – one of the five events on the Cadet Challenge and Presidential Physical Fitness Test that consist of a sit up movement from a lying position up to the point where your elbows touch your thighs

**Key Note Term**

**v-sit reach** – one of the five events on the Cadet Challenge and Presidential Physical Fitness Test that consist of stretching a number of inches past an established baseline

**V-Sit Reach**

First, take off your shoes; then, assume a sitting position on the floor or a mat with your feet 8 to 12 inches apart and your heels behind a baseline. A yardstick or other measuring device marked in inches will be between your heels running perpendicular to the baseline.

While a partner (or partners) holds each leg flat to the floor, flex your feet and slowly lean forward, stretching your hands (with the thumbs clasped and palms down) to the farthest point possible. Use the yardstick as a guide. There are three practice tries; the fourth attempt is for score. You should complete the v-sit reach by stretching the number of inches past the baseline, as indicated in Table 1.2.5.

**Table 1.2.5: Baseline for the V-Sit Reach**

<i>Age</i>	<i>PPFA (85%)</i>		<i>NPFA (50%)</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
14	4.5	8.0	1.0	4.5
15	5.0	8.0	2.0	5.0
16	6.0	9.0	3.0	5.5
17	7.0	8.0	3.0	4.5

Courtesy of CACI and the U.S. Army.

**Alternative Event: Flexed-Arm Hang**

If you cannot do one pull-up, you may do the **flexed-arm hang** in order to qualify for the NPFA or PPFA. To qualify for the PPFA, you must do pull-ups.

From a standing position on the floor or a mat, climb the ladder until your chin is above the pull-up bar. Grasp the bar with your hands, shoulder-width apart. The back of your hands must be toward your face with your thumbs under the bar. Step off the ladder while a partner removes it and prevents your legs from swinging. Your chin should clear the bar. The stopwatch is started at the command “go.” Strive to keep your chin level for the appropriate number of seconds indicated in Table 1.2.6. The stopwatch is stopped when your chin rests on the bar, you tilt your chin backward to keep it above the bar, or your chin falls below the level of the bar.

**Table 1.2.6: Standards for the Flexed-Arm Hang**

<i>NPFA (50%)</i>		
<i>Age</i>	<i>Male</i>	<i>Female</i>
14	20	9
15	30	7
16	28	7
17	30	7

Courtesy of CACI and the U.S. Army.

**Key Note Term**

**flexed-arm hang** – an alternative event for the pull-up in the Cadet Challenge and Presidential Physical Fitness Test



## Conclusion

The Cadet Challenge is an introduction to exercising for a specific goal. You will see your scores improve as you continue to practice. Making healthy changes in your lifestyle and working hard to reach this goal will make you a stronger, healthier individual, both mentally and physically, and will bring you the great satisfaction of a job well done. For more information on The President's Challenge and the Presidential Physical Fitness Test and exercises, go to the President's Challenge Web site at [www.presidentschallenge.org/misc/download.aspx](http://www.presidentschallenge.org/misc/download.aspx) and download *Get Fit: A Handbook for Youth*.

The following lesson introduces you to the importance of good nutrition. You will learn that “you are what you eat,” and how a balanced diet is essential when planning a fitness program.

## Lesson Review

1. Explain the Cadet Challenge.
2. Contrast the difference between the PPFA and the NPFA.
3. Describe the five Cadet Challenge exercises.
4. Explain the proper techniques for the Cadet Challenge exercises.